

In the Claims:

Listing of Claims:

1. (currently amended) A vehicle ~~Vehicle~~ axle system for an agricultural or industrial utility vehicle, with a having a vehicle axle (30)— supported for oscillation preferably so that it can oscillate— wherein at least two and having wheels (28) can be rotatably attached to the vehicle axle (30) so that they can rotate, with and having a torque tube (38), which can be with one end connected ~~on one end~~ to a frame (14) of the a vehicle (10) and ~~on the other~~ another end connected to the vehicle axle (30) for supporting an the axle suspension, and ~~with at least one~~ having an electric drive (32), which is arranged on the vehicle axle for driving one of the wheels (30) and with which at least one wheel (28) attached to the vehicle axle (30) can be driven, characterized by: ~~in that there are electric components (40, 42) for the electric drive (32) on— preferably in— the torque tube (38)~~

electric components for the electric drive mounted to the torque tube, the electric components including a power electronics component for controlling electric power delivered to the electric drive.

2. (currently amended) The vehicle ~~Vehicle~~ axle system ~~according to~~ of Claim 1, wherein:

~~characterized in that the torque tube (38) has an essentially circular, oval, or polygonal cross section, is preferably assembled from several parts and in particular has a modular configuration.~~

3. (cancelled) Vehicle axle system according to Claim 1 or 2, characterized in that the electric components (40, 42) on the torque tube (38) have at least one power electronics component (40), with which, for example, the magnitude of the electric power that can be delivered to the electric drive (32) can be controlled.

4. (currently amended) The vehicle ~~Vehicle~~ axle system ~~according to~~ of Claim 1 ~~or 2~~, wherein:

~~characterized in that at least one the power electronics component (40) is arranged on the vehicle axle (30), wherein with the power electronics component (40), for example, the magnitude of the electric power that can be delivered to the electric drive (32) can be controlled.~~

5. (currently amended) The vehicle ~~Vehicle~~ axle system ~~according to one of Claims 1 to 4~~, wherein:

~~characterized in that the electric components (40, 42) on the torque tube (38)~~

~~have include~~ a frequency converter, ~~with which preferably~~ for converting the electric alternating current of variable frequency ~~that can be generated by an electric generator (26) can be converted first into direct current and then back into alternating current of a given frequency.~~

6. (currently amended)     The vehicle ~~Vehicle~~ axle system according to one of Claims 1 ~~to 5~~, wherein:

~~characterized in that the electric components (40, 42) on the torque tube (38)~~  
~~have include a~~ braking resistance (42), ~~with which preferably~~ for converting electric current generated by the electric drive (32) ~~that can be operated in generator mode can be converted into mechanical and/or thermodynamic~~ thermal energy.

7. (currently amended)     The vehicle ~~Vehicle~~ axle system according to one of Claims 1 ~~to 6~~, wherein:

~~characterized in that the electric components (40, 42) on the torque tube (38)~~  
~~have includes~~ a controller, ~~with which preferably~~ for controlling another the electric drive (32), optionally the power electronics component (40), the frequency converter, and/or the braking resistance (42) ~~can be controlled or regulated.~~

8. (currently amended)     The vehicle ~~Vehicle~~ axle system according to one of Claims 1 ~~to 7~~, wherein:

~~characterized in that the vehicle axle comprises a steerable (30) has a steering type axle and/or is embodied as a front axle.~~

9. (currently amended)     The vehicle ~~Vehicle~~ axle system according to one of Claims 1 ~~to 8~~, wherein:

~~characterized in that on~~ an electric interface is mounted to the torque tube (38) ~~there is at least one electric interface, with which at least one~~ the interface connecting a first electric line ~~on the vehicle frame and/or on the vehicle axle (30) can be connected to at least one~~ a second electric line on the torque tube (38).

10. (cancelled)     Vehicle axle system according to one of Claims 1 to 9, characterized in that the electric components (40, 42) on the torque tube (38) can be preassembled in a carrier structure, wherein for final assembly, the carrier structure can be mounted on or in the torque tube (38).

11. (canceled)     Vehicle axle system according to one of Claims 1 to 10, characterized in that the surface and/or the walls of the vehicle axle (30) and/or the torque tube (38) is embodied such that cooling of the electric components (40, 42) is possible.

12. (cancelled) Vehicle axle system according to Claim 11, characterized in that the surface and/or the walls of the vehicle axle (30) and/or the torque tube (38) has cooling fins and/or at least one channel, wherein the channel preferably has a meander like arrangement and, in particular, can carry a flow of coolant.

13. (cancelled) Torque tube, which can be connected on one end to a frame (14) of a vehicle (10) and on the other end to a vehicle axle (30) for supporting the axle suspension, characterized in that the torque tube (38) can be attached to a vehicle axle system according to one of Claims 1 to 12.

14. (cancelled) Vehicle axle, which can be installed on a vehicle (10) so that it can move and which is supported preferably so that it can oscillate, wherein at least two wheels (28) can be attached to the vehicle axle so that they can rotate, characterized in that the vehicle axle (30) can be adapted to a vehicle axle system according to one of Claims 1 to 12.

15. (cancelled) Vehicle, in particular an agricultural or industrial utility vehicle, characterized by a vehicle axle system according to one of Claims 1 to 12.